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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/943,866	08/31/2001	James C. Easley	7703	2234

1688 7590 05/27/2003

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EXAMINER

PATEL, TULSIDAS C

ART UNIT	PAPER NUMBER
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2839

DATE MAILED: 05/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

12-8-03

Response filed on 11/23/03

Office Action Summary

Application No.

09/943,866

Applicant(s)

EASLEY, JAMES C.

Examiner

T. C. Patel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s) ____.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ 6) ☐ Other: _____

DETAILED ACTION

General Status

1. This is a First Action on the Merits. Claims 1-13 are pending in the case.

Information Disclosure Statement

2. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

The specification pages 3 and 4, cites several references, however, there is no PTO-1449 submitted by the applicant.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohsawa (US 5,530,780) in view of Appledorn et al. (US 5,432,876).

Ohsawa, in figure 3, discloses a light diffuser disposed at one end of an optical fiber 1, the light diffuser having incisions at the surface for diffusing the light. Ohsawa, however, does not disclose cracks in the optical fiber. Appledorn et al. in figures 1-8 and in column 4, lines 46-49, discloses cracking as one of the method of providing discontinuity in the fiber for the purpose of diffusing the light. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Ohsawa and use cracking as taught by Appledorn et al. so that the light diffusing effect can be easily produced in the optical fiber.

For claim 5, the length of the crack would be a matter of design choice. For claim 6, Ohsawa discloses core to be plastic (column 3, lines 2-3).

5. Claims 7-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohsawa (US 5,530,780) in view of Appledorn et al. (US 5,432,876) as applied to claim 1-6 above, and further in view of Zamja et al. (US 4,195,907).

For claims 7-13, the cracking of fiber for the purpose of diffusion of light is taught by Appledorn et al. and it is known that application of tensile force to the fiber would crack the fibers due to the stress generated in the fibers, and therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use tension force to crack the fibers of Ohsawa. Also, Zamja et al. in column 4, lines 8-14, teaches use of heat for purpose inducing the crack, and therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the heat and/or tension for inducing the cracks as taught by Zamja et al., so that desired cracks can be produced for the purpose of diffusing the light. For claims 12 and 13, effect of organic solvent, such as alcohol on the

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fibers is well known and therefore, it is considered within the scope of one of ordinary skill in the art.

6. The prior art made of record and not relied upon is considered pertinent to applicant's invention. Nagao (US 3,626,040) shows compression of fibers.

Applicant also should consider these references in response to this office action. Should issue arise concerning the rejection presented above, these references may be relied upon in a subsequent action to support the lack of novelty or obviousness of claimed subject matter to one of ordinary skill in the art.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to T. C. Patel whose telephone number is (703) 308-1736. The examiner can normally be reached on 6:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild can be reached on (703) 308-2710. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1736.



T. C. Patel
Primary Examiner
Art Unit 2839

tcp
May 21, 2003